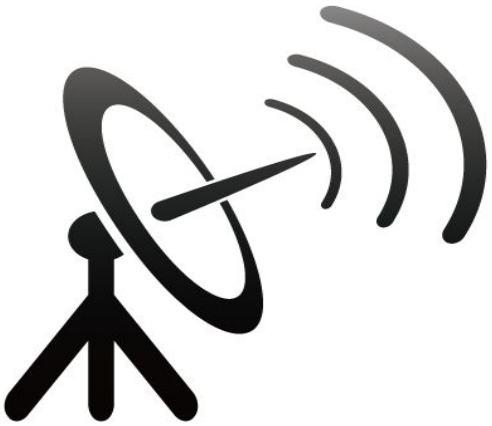


GSM /GPS ALARM KIT

AS200 USER'S GUIDE

IP67 Rated ¦ Satellite Tracking ¦ Cell Phone Control

Content Index

1-Introduction:

AS200 is a IP67 Rated GSM/GPRS/GPS alarm tracking box for multi applications.
This small unit is equipped with Quad Bands GSM/GPRS module, Hi-sensitivity GPS receiver and 3D Accelerometer. It's also can be connected with optional wireless/wired accessories like PIR senor, RF Key Fob, Alarm siren and Relay for external electronics device control

It supports both GPS tracking and backup LAC/CID tracking, which brings an idea solution with no blind tracking both indoor and outdoor.

1.1-Instruction of Safety:

Do not disassemble the device more than it is allowed. If the device is damaged, the power supply cables are not isolated or the isolation is damaged, before unplugging the power supply, do not touch the device.

All wireless data transferring devices produce interference that may affect other devices which are placed nearby.

The device may be fitted only by qualified personnel.

The device must be firmly fastened in the predefined location.。

The device is susceptible to water and humidity in environment with IP class greater than IP67.

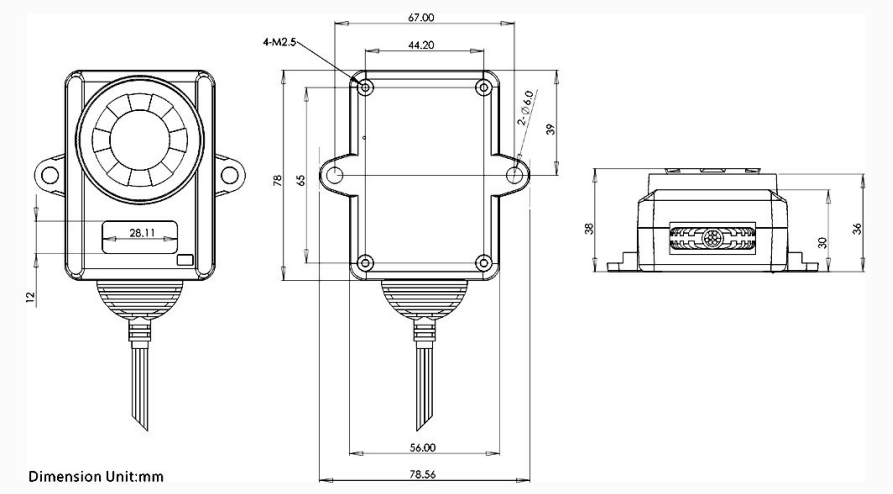
Any installation and/or handling during a lightning storm is prohibited.

Ensure that the batteries are not immersed in water. When stored, keep the device in a cool and dry place.

Ensure that device and batteries are not exposed to hot surfaces or direct sunlight.

1.2-Specification

- **Physical Specification:**
- Dimension: 56*78*38mm
- Weight:
- Enclosure: ABS
- IP Rating: IP67
- Connector: 14Pin



- **Power Supply:**
- Voltage: 9-36V DC
- Power Consumption:
  70-150mA(All active)/
  Simple Sleep:<15mA (GSM ON, GPS Off, Alarm trigger active)
  Deep Sleep: <5mA (GSM Off, GPS Off, Alarm trigger active)
- Internal Battery:800mAH, 3.7V

- **GPS Navigation:**
- Antenna: Internal
- Receiver: uBlox NEO 6M engine
- Sensitivity: -162dBm
- Navigation Update: 1Sec
- TTFF: Cold Starts: 29s/Aided Starts: <1S/ Hot Starts: <1S

- **GSM:**
- Antenna: Internal
- Modem: QUECTEL M35 /Quad Bands:850/900/1800/1900MHz

- **Radio Frequency:**
- Working frequency: 433MHz.
- Code: 1527/2240 study
- Working Voltage: 12V (27A 12V dry battery)
- Control Distance: 20-50M

- **Environmental:**
- Working Temp.: -20℃ ～+75℃
- Humidity: 20-95%

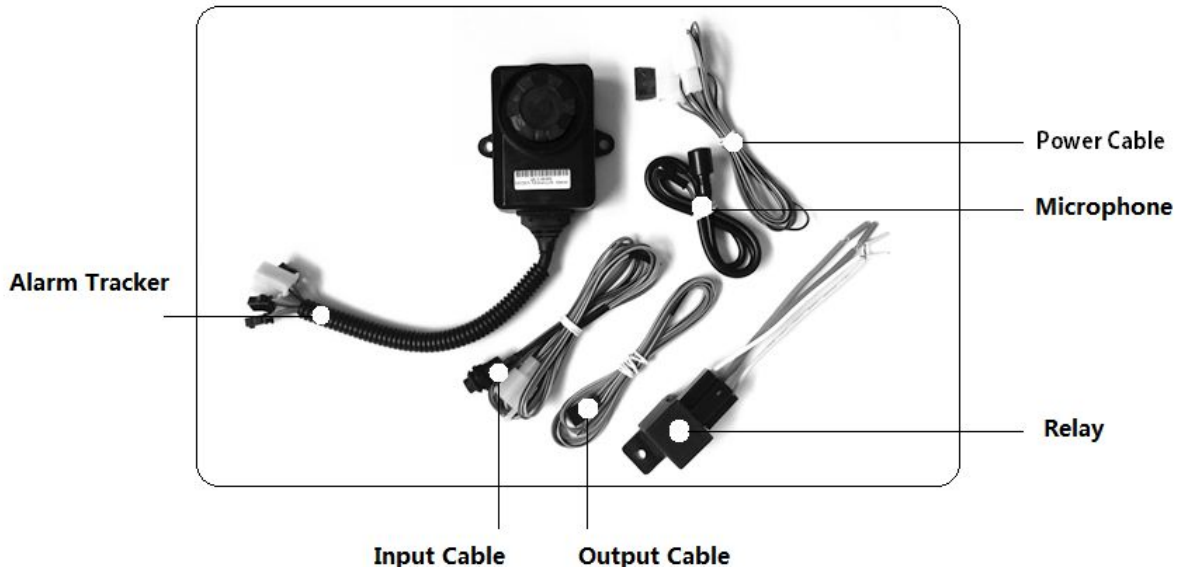
1.3-Typical Application:

- Motorcycle/ATVs
- Motor Homes
- Boats & Yacht

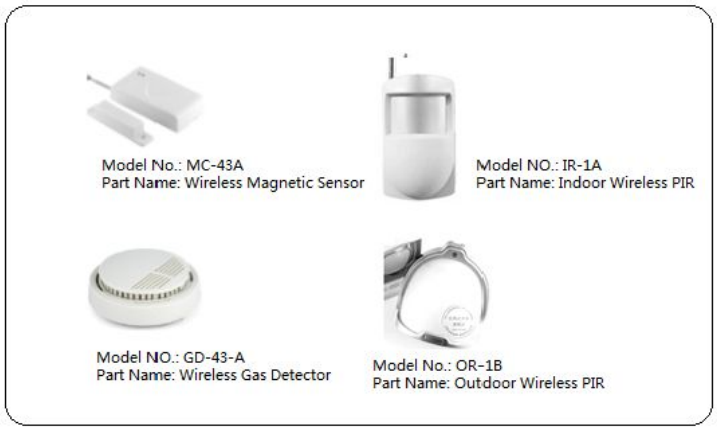



1.4-Package Contents:

1.4.1Standard Package Contents



1.4.2 Optional Accessories



Note:

Please kindly noted that optional accessories is not a standard parts inside the package. They need to purchase separately from Manufacturer.

2-Knowlege Before Usage:

2.1- How it works?

The AS200 mainframe works as a host box with multi input/outputs. The mainframe will process to get GPS location and various working status from inputs and send those information to preset Phone Numbers or IP/Port Server via GSM network. Cell Phone or Server software can send commands to control outputs action and also acquire different information by available commands.

2.2 Factory Default Setting

- Device SMS Command Password: **1234**
- IP/Port/APN: Empty
- Alarm Alert Phone No.(A/B/C/G): Empty
- Arm/Disarm Status: Disarmed
- Speed Over Limit: Off
- GEO Fence: Off
- Data Transmit Mode: SMS
- GPRS Communication Mode: TCP /(UDP supported)
- Siren: Internal Buzzer ON
- Automatic Immobilizer in Alarm: Disabled
- Automatic Power supply switch from external to internal when external power low: Enabled
- External Power low voltage Alert Level: less than 11.5V DC
- Auto Arm: Disabled
- Power Saving Mode: Simple Sleep
- SMS Data Time Zone: GMT

2.3 Power Supply

2.3.1 External Power and Internal Power

AS200 works with two power supply mode: External Power and Internal Battery.

It's working normally with external power supply range from 9-36V DC. When the external power is disconnected or with low voltage output, device will switch to work on internal battery automatically. And it also will send" Circuit Cut Off" or "External power low voltage" Alert to preset Alerts Phone Numbers.

Note:

- When external Power is less than 5V DC, system will treat as disconnected
- Default External Power low voltage alert level is 11.5V DC. This parameter is available for configuration according to different application environment. Configuration commands please refer to APPENDIX “Available SMS commands” list.
- When both external and internal power supply in low status, device will get into deep sleep mode by external power source

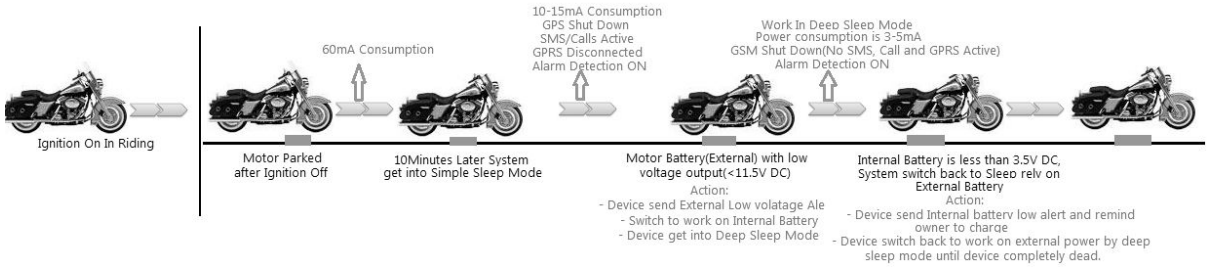
2.3.2 Sleep Mode consumptions and how it works

Simple Sleep when Ignition Off:
GSM Sleep with SMS/Call Active, NO GPRS Connection and GPS shut down
All Alarms Detection working normally
Power Consumption in standby without alarm trigger: 10mA

Deep Sleep when Ignition Off:
GSM Shut down, NO SMS/Call active, GPS shut down
Alarms trigger detection: Off 6seconds, detect 2seconds in recycle
Average power consumption without alarm trigger: <5mA

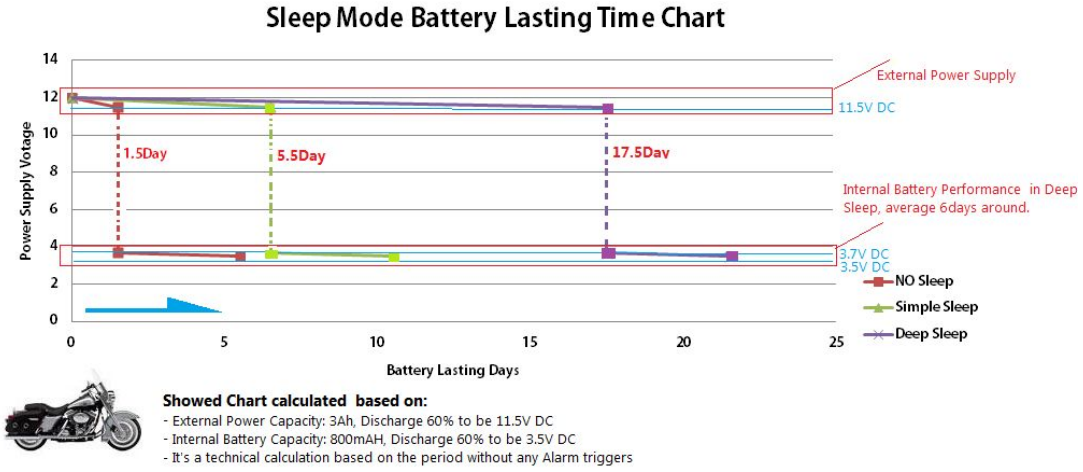
NO sleep when Ignition Off:
GSM all ON with SMS/Call active, and GPRS connected with Server with continuously data sending
GPS ON
All alarm detection work normally

Default Working Process after Ignition Off:



Note:
- Device default Sleep mode is “Simple Sleep”;
- When external power get low voltage output, system will forcibly get into deep sleep mode until ignition was started on or battery charged
- During this process, any alarm trigger will wake up device to normal working mode.

Please check following Battery lasting time based on different Sleep Mode Settings:



2.4 Transmitter Operation

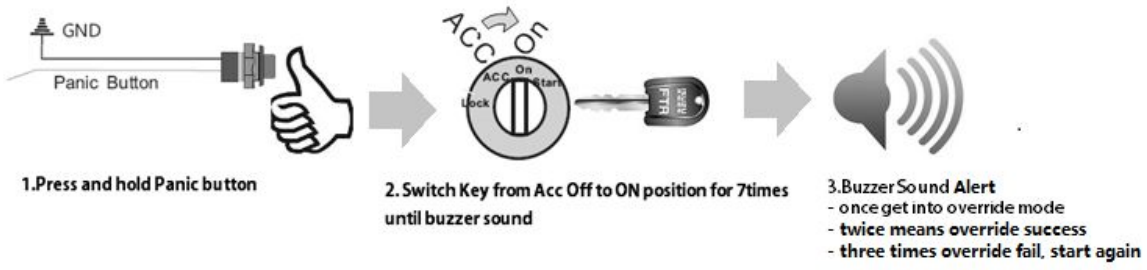
2.4.1 Transmitter Button functions

Arm: Buzzer sound once, or direction light flash once
Disarm: Buzzer Sound Twice or direction light flash twice.
Mute Key: In siren sounding, press this button to stop the sounding.
In panic, Activate Siren to sound. Or in parking lot, press this button for car finding.

2.4.2 Transmitter OVERRIDE

If your transmitter is lost or damaged, or the transmitter battery is flat, the system can be overridden by Ignition switch conjunction with Panic Button.

Please follow below process to finish the transmitter overridden operation:
1. Send SMS command to clear all existing transmitter code which stored in the system
2. Disarm the system by SMS command
3. Press and Hold Panic button
4. Switch Key from ACC off to ON position continuously 7times
5. Buzzer will sound once to indicating Overridden mode entered
6. Press any button of the transmitter
7. Buzzer sound twice again to indicate override success and exit overridden mode



If system get into overridden mode, and no transmitter button was pressed or did not receive any incoming signal during 20seconds, buzzer will sound bibibi three times and exit override mode
After you pressed the transmitter button during overridden mode, but system failed in accident due to unexpected reason, system also will sound bibibi three times to indicate failure.

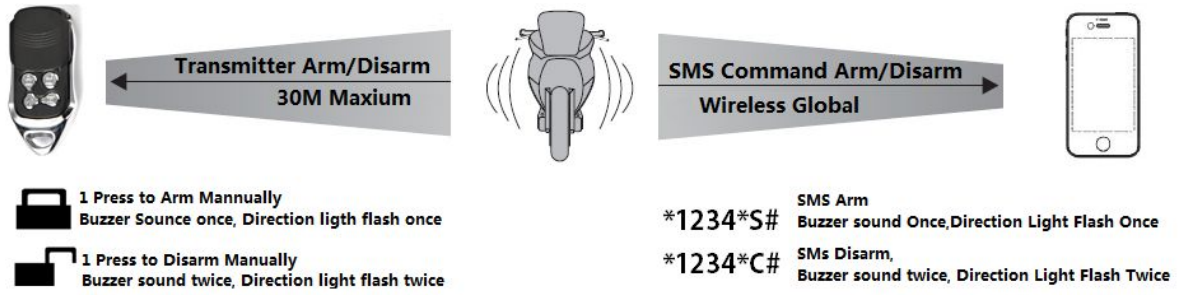
You can start the process again until you get it work success.

For other wireless sensor, like Door/window contact, Smoke and gas detectors follow the same process to integrate them to system.

3. Functions and Operation:

3.1 Arm/Disarm

Automatic Arm:



If the system was configured to allow automatic Arm, it will arm automatically 8Minutes after ignition is switched OFF, or you can arm the system manually before this time.If the system was Disarmed when ignition is OFF, it will arm automatically after 8Minutes either.

You can disable this "AUTOMATIC ARM" function by SMS command. Factory Default is disabled.
Enable SMS command: *1234*AutoArmON#
Disable SMS command: *1234*AutoArmOFF#

3.2 Alarm functions

In Armed status, any illegal operation will trigger an alarm action. In alarm, system siren(buzzer) will sound for 15seconds, and also send alarm alert via SMS and missed call to preset phone numbers A/B/C.

Please check following alarm events alert system:

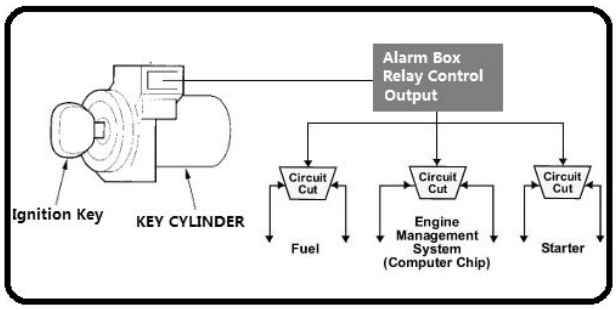
Alarm Event	Receipient A	Receipient B	Receipient C	Siren Sound	SMS Alert Contents
Shock	SMS Once	No	No	Yes	Shake Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Door Open	SMS Once&Call Once	SMS Once&Call Once	SMS Once&Call Once	Yes	Door open Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
External Power Disconnected	SMS Once&Call Once	SMS Once&Call Once	SMS Once&Call Once	No	Circuit Cut-off Alert;2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Ignition Started On	SMS Once&Call Once	SMS Once&Call Once	SMS Once&Call Once	Yes	Engine on Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Panic Button Pressed	No	SMS Once&Call Once	SMS Once&Call Once	No	Highjack Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948

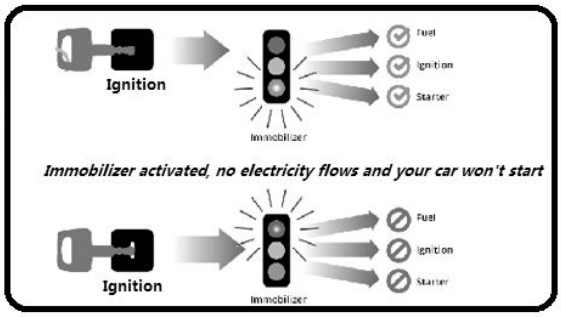
3.3 Immobilizer Engine

When system received SMS Command ***1234*STOP#**, it will activate immobilizer to get ignition not

started. ***1234*K#** command will deactivate it.

Automatic Immobilize Engine in Armed status and Alarm events:
Upon Alarm events in armed status, system will automatic activate the immobilizer. Default is disabled this





automatic immobilizer function.
You can use SMS command ***1234*autoCutON#** to activate it. And ***1234*autoCutOff#** will disable this automatic feature.

3.4 Power Saving

The system is designed to have different sleep mode when ignition off. In different sleep mode, the power consumption are different. Details please check <**2.3.2 Sleep Mode consumptions and how it works**>.

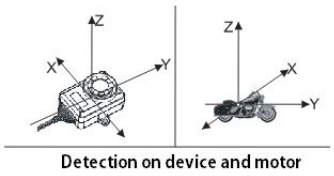
Please check following Commands for Power saving activate:

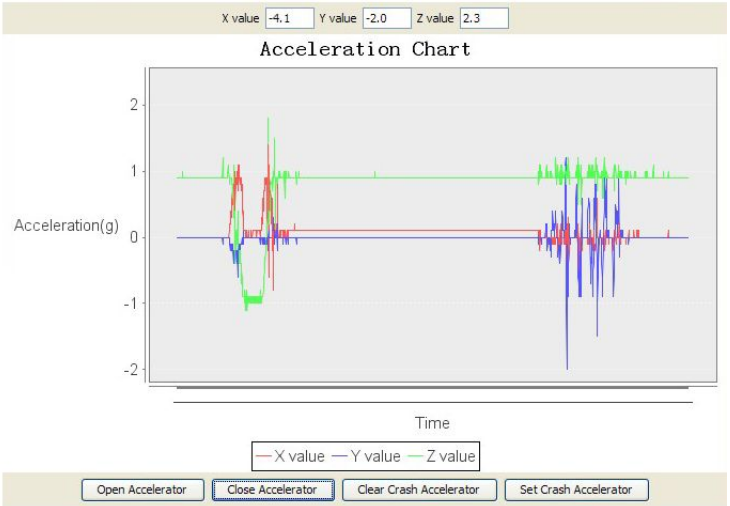
Sleep Mode	Activation SMS Command	Consumption	Working status
Simple Sleep Mode	*1234*SL*O#	10-15mA, started in 10Minutes after ignition switched off	GPS shut down, GSM Standby for SMS/Calls, NO GPRS connection. Alarm detection active, if alarm triggered, device wake up to normal working mode with Location fix and try GPRS connection.
Deep Sleep Mode	*1234*SL*A#	<5mA, started in 10Minutes after ignition switched off. Or forcibly started when external power voltage low<11.5V DC	GSM and GPS shut down. MCU sleep, wait up every 4seconds to detect I/O evemts. If detected alarm trigger in I/O, system will wake up to fix GPS location and process SMS/Call Alerts In Deep sleep, no SMS/Call response. RF transmitter response normal.
No Sleep when Ignition Off	*1234*SL*C#	60-80mA	Normal working mode.

3.5

3D Accelerator for Shock Alert and Crash accident Detection

AS200 was designed to use 3D accelerator detecting movement.
Check as following picture to about how it works:





- **Shocking Alarm:**
  System will detect all X,Y,Z acceleration, any changes in all X,Y,Z axis will be calculated, every changes which over 0.1G, system calculated for shocking once, every 5Seconds scan and calculate once.
  We use 5seconds average shocking times as shocking sensitivity.
  1=most sensitive
  200= Most insensitive.

  SMS commands for adjusting shocking sensitivity:
  ***1234*VS*xxx#** **(xxx=001-200)**

  Switch On/Off Shocking Alarm SMS commands:
  ***1234*H#** <Switch On shocking Alarm>
  ***1234*N#** <Switch Off Shocking Alarm>

- **Crash Accident Detecting:**
  Crash accident has two cases:
  1) Knock from front or back

Calcuate the impact Y Axis Only.
Conditions for Trigger:
- Ignition must be ON
- GPS speed > 20Km/H
- Exceed Preset Y axis acceleration value

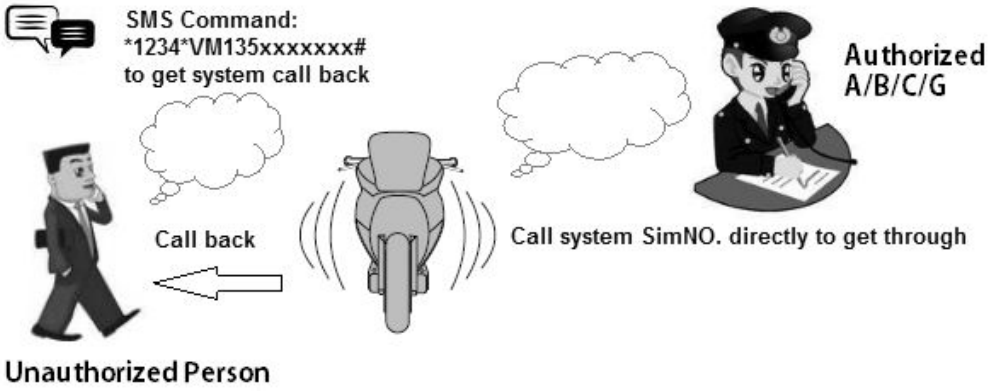
You need to preset the Y axis acceleration value for this impact. Please consult with your distributor about how to do this.

2) Fall down to two sides

System will detect automatically, no need calibration and setup.

Setup SMS commands:
Setup Crash Parameter ***1234*CS*-1.0,8.0,-7.0#** <-1.0,8.0,-7.0 means acceleration value on X,Y,Z axis>
Switch Off Crash Alert ***1234*GOFF#**
Switch On Crash Alert ***1234*GON#**

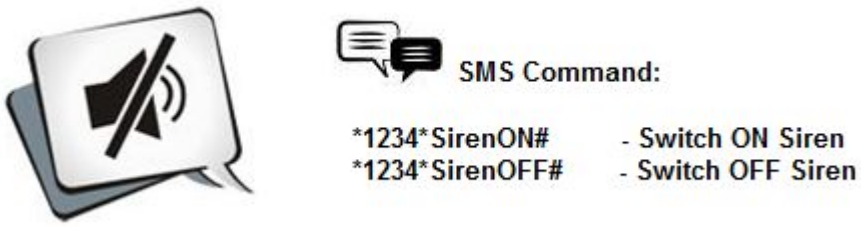
3.6 Voice Listen-in



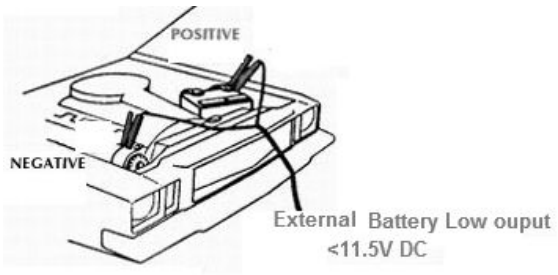
Non-authorized Person do Voice Monitoring SMS command:
***1234*VMxxxxxxxx#** <xxxxxxx is call back phone No. for system>

3.7 Switch ON/Off Siren

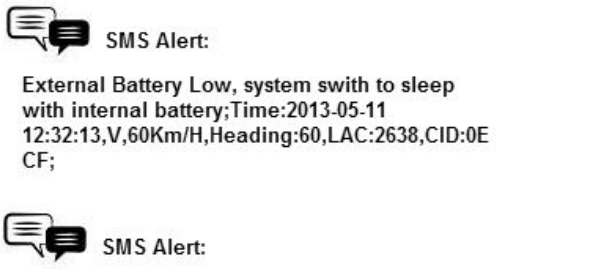
By SMS command, user can switch ON/Off siren remotely.



3.8 Battery Low



Internal Battery
<3.5V DC



3.9 Recovery Factory Default

SMS Command

*1234*V#

Recovery all setting to be factory default!!

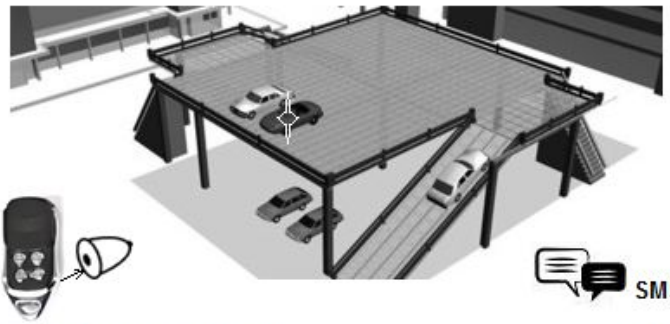
3.10 Remote Reboot

SMS Command

*1234*Z#

Remotely reboot device

3.11 Locate in parking Lot



Remote Controller Locate
- Press Horn Button
- Sound Siren

SMS Command to Loate

*1234*L#

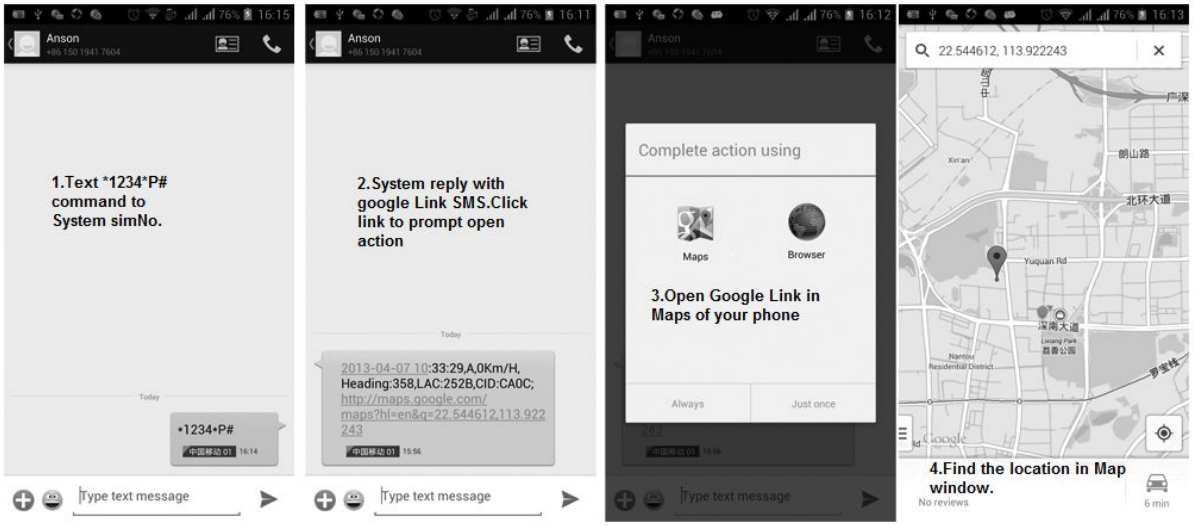
System to sound siren 20seconds unpon this

3.12 GPS Tracking features

3.12.1 Query Location

Function Name	SMS Command	System Reply
Check GPRMC Format Data	*1234*GPS#	$GPRMC,063231.00,A,2232.64712,N,11355.45466,E,0.581,195.93,050811,,,A*6C
Acquire Google Link	*1234*P#	Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Query Coorindates	*1234*GPSD#	Time:2011-12-08, 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF,Lat:22.54415,Lon:113.92423

Open up your google Link in smart phone to check location on map:



3.12.2 Speed Limit Manage

SMS Command

Function Name	SMS Command	System Reply
Speed Limit Setup	*1234*SPDxxx#	Speed Over alert activated: xxx Km/h
Query Speed Limit	*1234*SPD#	XXXkm/h
Speed Over Alert		Over Speed Alert;2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF;

3.12.3 GEO Fencing Management

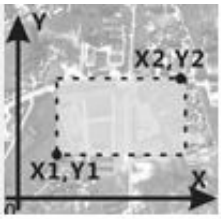
AS200 maximum allows user to create 25 GEO fencing areas. And the area shape can be cirlular or rectangular. Considered text message only can contain 140Bytes text, so user need to create multi-areas with more than one text message command.

GEO fencing alert support both Entry and Exit event.
Details please check following SMS command definition.
***1234*GEOXXYZ,X1,Y1,X2,Y2;0110,X2,Y2,R2;0220,X3,Y3,R3#**

In above sample command, it defined 3 GEO fencing areas. First one is rectangular, second and third one is circular shapes
1234 // Command header with password
GEO // Command Name
XXYZ //First Area definition for area ID, area shape and events alert type.
XX is area ID. Ranges=00-24, maximum 25Areas supported=Alert type, Y=1 means entry, Y=2 means exit, Y=3 means alert both in entry and exit. Z=Area shape, Z=0 means circular, Z=1 means rectangular.

X1, Y1, X2, Y2 // Rectangular shape parameter format. (Unit must be degrees, for Western

and southern value put – before it).Taken value as following chart:



0110,X2,Y2,R2 //Circular shape area parameter format.

In this area, Area ID=01, event alert when entry this area, area shape type is cirlular. X2,Y2 are coordinates for circle center point. R2 is radius value. See as following picture:

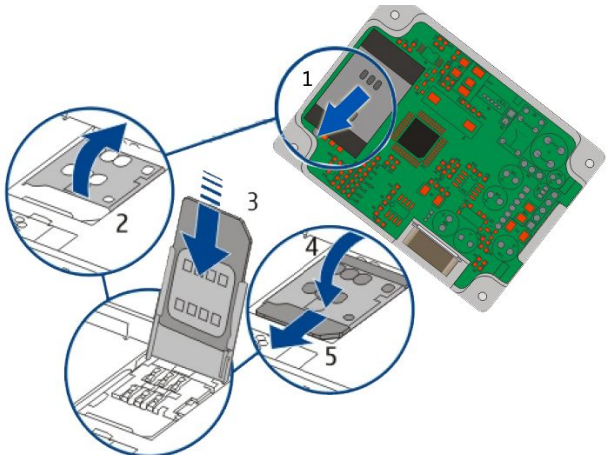
4. Get started to use and Installation

4.1 How to Insert SIMCARD

1).Unscrew the AS200 Box

2).Find the SIMCARD slot on PDB boards

3) Follow below illustration to insert the SIMCARD IN and switch it back.



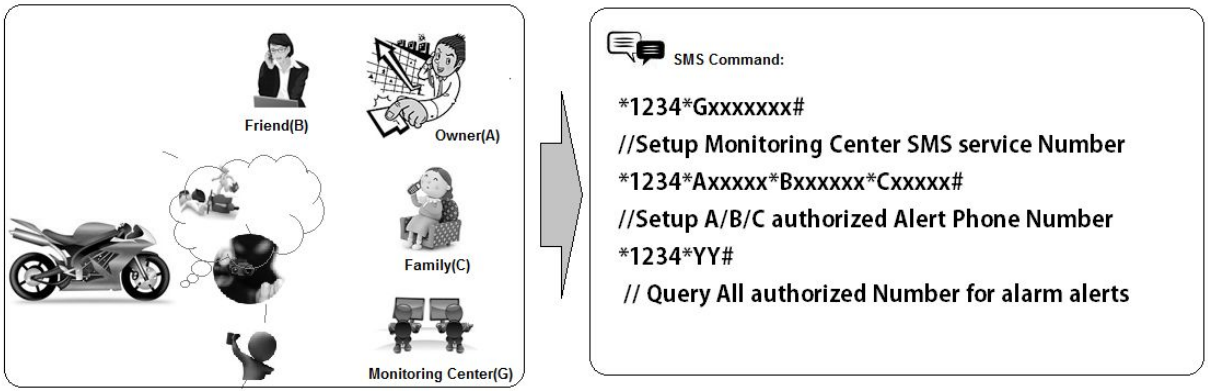
4.2 Device Configuration

Considering AS200 is a security system, before your usage, please configure it properly according this manual and get it work well.

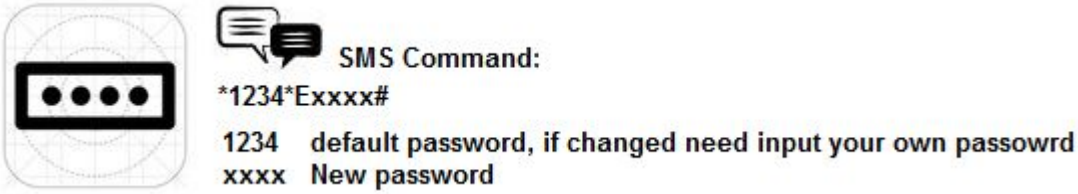
4.2.1 Authorization Alert Phone Numbers

In AS200, we defined 4 authorization number for different user roles.

A/B/C is for owner, B/C are for owner's close friend or family members. A/B/C authorization numbers will receive SMS alerts and also Missed call alert from system.
G Number is designed for monitoring center purpose. And this number will only receive SMS alerts, no call alert to this Number.



4.2.2 Modify Password

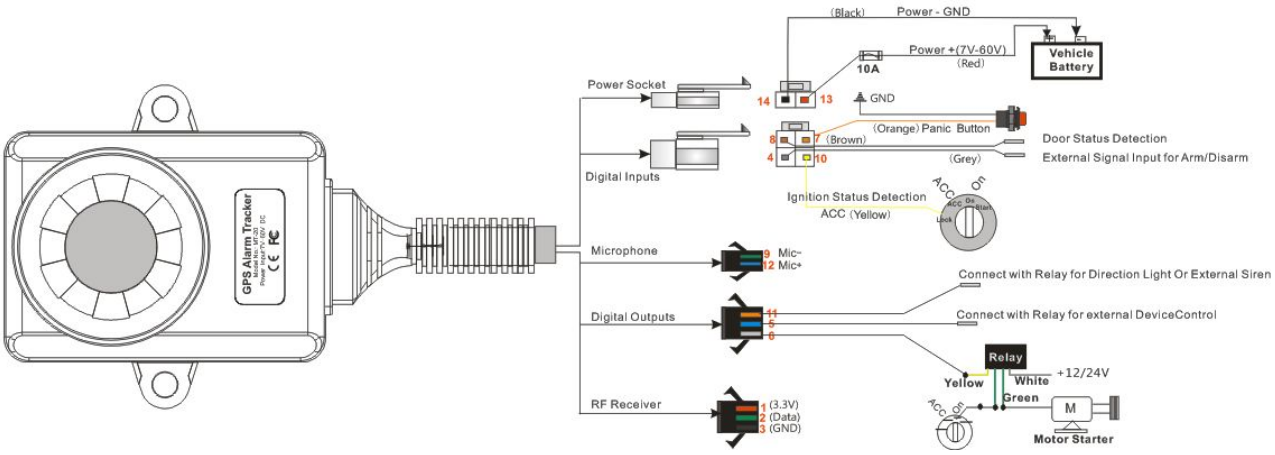


Note:
- Password max. length is 4 bytes
- Password can be a combination of letters and numbers

4.2.3 Time Zone Localization Setting

Note:
- System default Time zone is UTC time
- This time zone setup will effect on system SMS data time.

4.3 Wiring Diagram



Pin Definition Detail explains as:

Wire Description	Pin No.	Wire Color	Function/Specification Description
Power	13	Red	Power positive pole, 8-60V DC
	14	Black	Power Ground
Digital Output	11	Orange	Connect to Direction light or Alarm Horn
	5	Blue	Control External device via Rely
	6	Grey	Engine Immobilizer
Digtal Input	10	Yellow	Ignition status Detection
	8	Brown	Door Status(=0V: Open)
	7	Oragne	Panic Button(=0V:effective)
	4	Grey	Input signal for Arm/Disarm
Microphone	9	Blue	Mic+
	12	Green	Mic-
RF Receiver	1	Red	3.3V Power
	2	Green	RF Data
	3	Black	Ground

5. Problem Shooting

Problems	Reason	SOLUTIONS
Remote Controllers don't work	Battery low, Not program to system	Replace with new Battery, OVERRIDER AGAIN TO SYSTEM
Password Lost		Get help from Factory or Distributor
SMS command sent without reply	SIM gets no enough credit, Not inserted SIMCARD WELL, Bench testing didn't screw the box with GSM antenna not connected well, System is in deep sleep mode	Check SIM money balance, re-insert SIMCARD, SEAL the box with screws, Connect ignition ON or make alarm to wake up device
SMS Delay response	Antenna is connection well with box unsealed, or network delay and busy	Seal the box with screws, Try again a little bit later time.
Weak GSM signal	Box not sealed well with screw, Location area	Seal the box with screws, try a new testing location, or new installation placement
NO GPS signal	Probabaly caused the location and weather	If weather is good, try to find out if device was roofed by metal part or heavy trees, high buildings.
Alarm Alerts not received	NO authorized Numbers was configured to system, or phone number was not configured properly, System with wrong power supply range,	check authorization alarm alert phone number setting,
Show in wrong location	No GPS fix	Weather bad or motor is in no GPS area
NO connect GPRS	IP/PORT/APN setting wrong, System is not regsitered correct in Server	Check with carrier with right APN name, and make sure with correct IP/Port setting for server
Location show in China or other country in Map	GPS postion is not fixed, take long time to get position fix	Try again later, or GPS receiver effective
NO Shock alarm even configured with most sensitivity level	Device is not fitted tight with motor body	Fasten the device with motorboy by tape or scews
FORMAT Incorrect reply for SMS Command	SMS command sent with wrong format,	Check if they are by English character, and no hidden space character
Many false Alarm	Power failure, Shock alarm	Check power wire connection with motor battery, or decrease shocking sensitivity
Motor battery consumpt so fast	Sleep mode setting wrong	Check the sleep mode setting

APPENDIX

1. Available SMS Commands List

Command Name	SMS Format	System Reply
Setup Center SMS Service No.	*1234*G13480877140#	Armed/Unarmed;G:xxxxxxxx
Delete G Number	*1234*G#	Armed/Unarmed;G:
Setup Alarm alerts No.	*1234*AXXXXX*BXXXXXCXXXX#	Armed/Unarmed;A:xxxxxB:xxxxxC:xxxxx
Delete A/B/C Number	*1234*A*B*C#	Armed/Unarmed;A:B:C:
Enable Siren Sound	*1234*SIRENON#	SIRENON OK
Disable Siren Sound	*1234*SIRENOFF#	SIRENOFF OK
Query all authorizaiton Number	*1234*YY#	Armed/Unarmed;A:XXXXXB:XXXXC:XXXXG:XXXXX
Modify Password	*1234*E4321#	Password has been changed!
Activate Immobilizer	*1234*STOP#	Immobilizer Enabled;$GPRMC,xxxxxx.xxx,A,xxxx.xxxx,N,xxxxx.xxxx,E,x.x,xxx.x, xxxxxx,,,A*xx
Deactivate Immobilizer	*1234*K#	Immoibilizer Disabled;$GPRMC,xxxxxx.xxx,A,xxxx.xxxx,N,xxxxx.xxxx,E,x.x,xxx.x, xxxxxx,,,A*xx
Recover to factory setting	*1234*V#	Factory Setting Recovered
Reboot Device remotely	*1234*Z#	Reset Ok;$GPRMC,xxxxxx.xxx,A,xxxx.xxxx,N,xxxxx.xxxx,E,x.x,xxx.x, xxxxxx,,,A*xx
Speed Limit Setup	*1234*SPDxxx#	Speed Over alert activated: xxx Km/h

Query Speed Limit	*1234*SPD#	XXXkm/h
Setup SMS Data Time Zone	*1234*GMT+/-XXXX#	GMT+/-XXXX Setup OK!
Query Time zone	*1234*GMT#	GMT+/-XXXX Setup OK!
Setup GPRS Parameter	*1234*GPRS:863070015806069,211.154.142.150,9114,T,CMNET,user,pass#	GPRS Parameter:863070015806069,211.154.142.150,9114,1,CMNET,User,Pass
Query GPRS Parameter	*1234*QP#	GPRS Parameter:863070015806069,211.154.142.150,9114,01, CMNET,,SMS/SMS+GPRS
Timing report Interval	*1234*ITV0010#	ITV Enabled:60
Ignition Off Report Interval	*1234*AV0060#	AV Enabled:0060
Voice Listen-in	*1234*VM15019417609#	<No reply>
Disable Shock Alert	*1234*N#	Shake Alert Off
Enable Shock Alert	*1234*H#	Shake Alert On
Arm	*1234*S#	Armed forcibly
Disarm	*1234*C#	Unarmed
Query system IMEI No.	*1234*IMEI#	IMEI:012207002358775
Query System status	*1234*X#	UnArmed/Armed; Engine:off/on; Door:off/on;Immobilizer:enabled/disabled;LAC:xxxxxx;CID:xxxxx;Signal Strength:xx $GPRMC,xxxxxx.xxx,A,xxxx.xxxx,N,xxxxx.xxxx,E,x.x,xxx.x, xxxxxx,,,A*xx
Check GPRMC Format Data	*1234*GPS#	$GPRMC,063231.00,A,2232.64712,N,11355.45466,E,0.581,195.93,050811,,,A*6C
Acquire Google Link	*1234*P#	Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Query Coordinates	*1234*GPSD#	Time:2011-12-08, 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF,Lat:22.54415,Lon:113.92423
Query System Version	*1234*VER#	Firmware Version:2.01
Setup shock sensitivity level	*1234*VS*xxx#	Vibration Sensitivity:020
Setup Crash Parameter	*1234*CS*-1.0,8.0,-7.0#	Crash Sensitivity -1.0,8.0,-7.0
Switch Off Crash Alert	*1234*GOFF#	Accident Alert Off
Switch On Crash Alert	*1234*GON#	Accident Alert ON
Setup external power low level	*1234*LBxxx#	LB:8.0V
Query power low level	*1234*LBQ#	LB:10.0V
Activate SMS mode only	*1234*SMS#	SMS Mode Activated

Activate SMS+GPRS mode	*1234*SMS+GPRS#	SMS+GPRS Mode Activated
Simple sleep activate	*1234*SL*O#	Simple Sleep Activated!
Deep sleep activate	*1234*SL*A#	Deep Sleep Activated!
No sleep activate	*1234*SL*C#	Sleep Deactivated!
Sound Siren	*1234*L#	No response, system sound siren 20seconds
Enable Auto Arm	*1234*autoArmON#	Auto Arm Activated
Disable auto Arm	*1234*autoArmOff#	Auto Arm Deactivated
Open battery charger	*1234*CHARGEROPEN#	Charger Activated
Deactivate battery charger	*1234*CHARGERCLOSE#	Charger Deactivated
GEO fencing area configuration	*1234*GEO0031,+/-DDD.DDDD,+/-DD.DDDD,+/-DDD.DDDD,+/-DD.DDDD；0110,+/-DDD.DDDD,+/-DD.DDDD,900000；0220,+/-DDD.DDDD,+/-DD.DDDD,1000;;#	Geofence OK
Cancel GEO area	*1234*GEO002#	Geofence Deactivated
Query single GEO area	*1234*GEO03#	0331,+/-DDD.DDDD,+/-DD.DDDD,+/-DDD.DDDD,+/-DD.DDDD //No area

Errors	Error Message	Reason Solution
Password Wrong	Key Incorrect!	wrong password, 4digits password only
SMS command format Wrong	Format Incorrect!	All SMS command gets no space character
Setup fail	Setup Failed!	Try again
Query fail	Query Failed!	Try again
Control fail	Control Failed!	Try again

2. Alarm Alert contents

Alarm Type	SMS alert Contents
Door Open Alarm	Door open Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Ignition ON alarm	Engine on Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Panic Alarm	Highjack Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
GEO Alarm	GEO Alert,ID: 01,type:Out/Into;2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Speed over Alarm	Over Speed Alert;2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Acccident Alarm	I'm in Traffic Accident;2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Shock Alarm	Shake Alert;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Power Tamper alarm	Circuit Cut-off Alert;2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948
Low Power alarm	External Battery Low, system swith to sleep with internal battery;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF;
Charge Power Alert	External and internal battery both in low, system will go to sleep. Please charge your battery;Time:2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF;